

1                                   **TITLE OF INVENTION**

2  
3                                   THE GLUE TOTE

4  
5                                   **CROSS REFERENCES TO RELATED APPLICATIONS**

6  
7                                   None

8                                   **STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH**

9  
10                                  No federal research money was used in the development of this  
11  
12                                  invention.

13  
14                                  **REFERENCE TO APPENDIX**

15  
16                                  No appendix accompanies this application

17  
18                                  **BACKGROUND OF THE INVENTION**

19  
20                                  Certain tradesman, particularly construction workers, are  
21  
22                                  required to bring various materials to job sites. Sometimes the  
23  
24                                  necessary equipment is in bags, bottles, rolls or cans. This  
25  
26                                  device allows the worker to carry two same sized cans in a handy  
27  
28                                  carrying device. This application will describe how a plumber for  
29  
30                                  instance will use the device.

31  
32                                  Most plumbers are very familiar with PVC (Polyvinyl Chloride)  
33  
34                                  piping or coated PVC. It is lightweight, very durable and is very  
35  
36                                  commonly used in houses and outdoor applications such as  
37  
38                                  irrigation systems. However, in order to connect the PVC together  
39  
40                                  the plumber must apply both a cleaner and a glue to the pipe in  
41  
42                                  order to make a secure and tight fit of the pieces of PVC piping.

43  
44                                  Without the use of the glue and the cleaner the piping  
45  
46                                  becomes brittle and fails. The material that is used to clean and  
47  
48                                  glue the pipe together are liquids, which are applied to the PVC  
49  
50                                  to connect the piping. These materials (cleaner and glue) are

1 stored in cans- pint size, quart size, or even gallon or drum  
2  
3 size. Usually a plumber carries a pint or quart size can to a job  
4  
5 site due to convenience and ease of transport.  
6

7 At times plumbers like construction workers are required to  
8  
9 work in cramped outdoor spaces particularly in ditches when they  
10  
11 are connecting the PVC piping. The environment is dirty and often  
12  
13 has uneven surfaces. One of the risks in the field for the  
14  
15 plumber is that the plumber may accidentally knock the can of  
16  
17 cleaner or glue over. This results in waste of the product and  
18  
19 waste of time for the plumber.  
20

21 Since both the cleaner and the glue must be applied to the  
22  
23 PVC pipe in order to make a secure fit, the plumber must carry at  
24  
25 least two cans - one for the cleaner and one for the glue.  
26

27 The purpose of this invention is to ensure that a plumber,  
28  
29 for instance, can carry either a pint or quart size can of the  
30  
31 glue and the same size can of cleaner to the job site at one time  
32  
33 in a handy carrying device. The cans are securely attached on the  
34  
35 bottom of the device in a recessed concentric circles and clamped  
36  
37 on the top of the can lid with a recessed groove on a spring-  
38  
39 loaded clamp. The recessed groove, which is on the underside of  
40  
41 the clamp fits over the top of the can. A T handle on the top of  
42  
43 the device allows the plumber to carry the device.  
44

45 The typical can of glue and cleaner has an applicator in the  
46  
47 middle of the can. The applicator is inserted into the liquid and  
48  
49 allows the cleaner or the glue to be applied to the pipe. The  
50

1 plumber removes the applicator from the respective can, applies  
2  
3 the particular material (either cleaner or glue), and then  
4  
5 securely puts the applicator back in the appropriate can. It is  
6  
7 very important to prevent foreign material from entering the can  
8  
9 with the glue or the cleaner. It is also very important that the  
10  
11 can of cleaner or glue remain as airtight as possible. Both the  
12  
13 presence of foreign material and air will destroy the cleaner and  
14  
15 glue.

16  
17 The bottom surface of the base of the device is a flat  
18  
19 surface, which allows the plumber to rest the device on any  
20  
21 surface. The downward pressure of the spring between the handle  
22  
23 and the clamp of the device would ensure that both cans remain in  
24  
25 place in the device.

26  
27 This device may be used in any application where two cans  
28  
29 must be carried at once. This is not particularly limited to the  
30  
31 plumbing trade, but may also be used in other construction trades,  
32  
33 woodworking facilities or any application where cans must be  
34  
35 carried to a job site. The example of the plumber in this  
36  
37 application was used solely for illustration purposes.

#### 38 39 40 **BRIEF SUMMARY OF THE INVENTION**

41  
42 This is a device, which allows two cans, either pint or quart  
43  
44 sized to be carried at one time in a secure fashion. The bottom  
45  
46 of the device is either aluminum or molded plastic. A spindle in  
47  
48 the center of the device is screwed into a tapped and threaded  
49  
50 hole in the bottom or base of the device at one end and secured at

1 the other by a hex nut. The spindle is threaded at both ends to  
2  
3 achieve that result.  
4

5 Between the handle and the base of the device is a clamp, which is  
6  
7 used to secure the pint or quart size cans to the device. On the  
8  
9 underside of the clamp recessed grooves are provided. These  
10  
11 grooves fit over the lip of the cans.  
12

13 A spring is located between the underside of the handle and  
14  
15 the top surface of the clamp of the device. On the point of  
16  
17 contact with the top of the cans the clamp has a recessed or  
18  
19 grooved lip, which allows the clamp to fit over the lip of the  
20  
21 container. The downward pressure of the spring insures a secure  
22  
23 fit. On the sides of the clamp are two pieces of stock, which  
24  
25 extend perpendicular from the sides of the clamp and allow the  
26  
27 user a convenient device to pull the clamps off the cans.  
28

29 On the top surface of the base of the device are recessed  
30  
31 rings, which are the diameter of a pint and a quart sized can.  
32  
33 This will ensure that the cans will not slip during normal  
34  
35 operation as it is being clamped and helps to insure that the cans  
36  
37 remain in place during normal use.  
38

39 A "T" handle at the top of the spindle, which is secured by a  
40  
41 hex nut, provides an easy means to carry the device.  
42  
43  
44  
45  
46  
47  
48  
49  
50

**BRIEF DESCRIPTION OF THE DRAWINGS**

This is a device to carry two cans at one time in a secure fashion. The device is depicted as shown by the following drawings:

Figure 1 is an exploded view of the invention

Figure 2 is a front view of the invention

Figure 3 is a back view of the invention

Figure 4 is a right side view of the invention

Figure 5 is a left side view of the invention

Figure 6 is a top view of the invention

Figure 7 is a bottom view of the invention

Figure 8 is an exploded view of the invention depicted from the bottom

## DETAILED DESCRIPTION

According to Figure 1 this device consists of a bottom or base section (100), a clamp (200), a spindle, which is threaded on both ends (300), a spring (400) and a T handle (500). The bottom section (100) is approximately 11  $\frac{3}{4}$ " inches long by one-half inch thick. The bottom section has a width of approximately 4  $\frac{3}{8}$ " inches. Figure 8 is an exploded view of the device and shows the recessed grooves (220) on the underside of the clamp (200).

In the center of the base section there is a tapped and threaded hole, which is approximately one-half inch in diameter (600) (Figure 1).

One end of the threaded spindle (300), is screwed into the hole (600) on the bottom section. The spindle (300) extends through a hole in the center of the clamp (200) and through a hole in the center (510) of the T handle (300). It is secured in place by a hex nut (700).

On the top of the bottom or base section (600) two recessed concentric circles (800 and 900) are formed on the top surface of the base section. These concentric circles allow a quart and pint jar to be securely positioned in the device. According to Figure 1, a pint size and quart size can have been drawn to demonstrate the placement within the recessed concentric circles.

The recessed concentric circles (800, 900) are slightly greater than the diameter of the bottom of each of the size cans so that the cans will fit securely in the respective recessed

1 concentric circle on the top surface of the base section of the  
2  
3 device. The concentric circles are recessed to a depth of .187  
4  
5 inches for the quart size and .375 inches for the pint size can.  
6

7       There are two sets of identical recessed concentric circles  
8  
9 on each side of the base section as depicted in Figure 1 and are  
10  
11 equally spaced from the midpoint of the base section. Figure 6  
12  
13 shows a pint size can in place and the recessed ring for the quart  
14  
15 size can.

16  
17       A spindle, which is secured in the hole at the bottom of the  
18  
19 base section as depicted in Figure 1 (600) is inserted into the  
20  
21 hole (600) which has been tapped and threaded in the center of the  
22  
23 base section and the spindle is secured at the top by a hex nut  
24  
25 (700). The spindle is approximately 8 ½" inches long and is  
26  
27 threaded at both ends.

28  
29       The device may be made from a variety of materials, but  
30  
31 stainless steel is preferable because it is non-corrosive and  
32  
33 durable. It may also be made from aluminum or molded plastic  
34  
35 depending on the specific needs of a job.

36  
37       The spindle is screwed into the hole (600) in the middle of  
38  
39 the base section and is inserted through the hole in the center of  
40  
41 the clamp (200) and through the hole in the center of the T  
42  
43 handle (500). A spring (400) is inserted over the spindle and is  
44  
45 positioned between the top surface of the clamp and the bottom  
46  
47 surface of the T handle.

48  
49       The T-shaped handle (500) is approximately 5" inches in  
50

length. This will allow the tradesman to pick up this device with one hand.

Between the T-handle and the base section there is a clamp (200) (Figure 1). A hole in the middle of the clamp allows the spindle to pass through the center of the clamp. The hole in the middle of the clamp is approximately one-half inch in diameter. The spindle is inserted through the middle of the clamp. The clamp freely moves up and down in a vertical fashion once the device is assembled. The clamp is approximately  $2 \frac{3}{16}$  inches in length. The clamp is equipped with one inch (210) rods, which are inserted into a hole, which has been tapped and threaded on each side of the clamp. A lock nut (215) secures the rods (210) in place. These rods allow the tradesman to pull the clamp up and remove the can(s) easily. The rods (210) extend approximately one inch from the sides of the clamp and are perpendicular to the sides of the clamp.

On the bottom surface of the clamp (200) recessed grooves (220) have been placed on the underside of the clamp (Figure 8). The recessed curved grooves have the following approximate dimensions:  $\frac{3}{16}$  width,  $\frac{3}{16}$  diameter with a 1-inch radius. They are approximately  $1 \frac{3}{8}$  inches apart on the underside of the clamp.

The purpose of the recessed grooves (200) is to allow this device to be clamped to the top lid of the can so that the cans are held securely in place by the downward pressure, which is



1 exerted by the spring (400).  
2

3       Between the top of the clamp (200) and the underside of the  
4  
5 T-handle, a compression spring (400) is placed to force the clamp  
6  
7 on the top of the cans (Figure 1). Without this spring the cans  
8  
9 would not remain in place.  
10

11       The specifics of the compression spring are not relevant to  
12  
13 this particular patent; however there must be sufficient downward  
14  
15 pressure on the cans to ensure a tight and secure placement of the  
16  
17 cans in the device.  
18

19       It is contemplated that this device will be made from  
20  
21 durable, non-corrosive materials including but not limited to  
22  
23 stainless steel, aluminum and molded plastic.  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50